

COURSE ANNOUNCEMENT

SPRING 2007

MAT 571

*Real
Analysis II*

Instructor: Jack Spielberg
Time: 10:40 - 11:55 Tuesday & Thursday
Location: CDS 321
Schedule Line #: 86592
Credit Hours: 3

Course Description: This is the continuation of MAT 570. Topics to be covered include Fourier analysis in R^n and Z^n , an introduction to general topology, and those portions of functional analysis regarding topological vector spaces (including Banach spaces, Hilbert space, local convexity, open mapping theorem, closed graph theorem, uniform boundedness principle, Hahn-Banach theorem, and the Riesz representation theorem). I plan to offer MAT 578 next fall as a continuation of the functional analysis into operator theory and spectral theory.

For most of the course we will follow the text of Folland.

There will be weekly problem sets and no exams.

Prerequisites: MAT 570, or some knowledge of measure theory, or instructor approval.

Textbook: *Real Analysis, Modern Techniques and their Applications*,
Gerald Folland, Wiley.

Questions about the course are welcome, and should be directed to the instructor, at (96)5-3286 or jack.spielberg@asu.edu